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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/658,867

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5172

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EXAMINER

PRENTY, MARK V

ART UNIT

PAPER NUMBER

2822

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/658,867	COURSEY, BELFORD T.	
	Examiner	Art Unit	
	MARK PRENTY	2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 21 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____.  | 6) <input type="checkbox"/> Other: _____.                                   |

This Office Action is in response to the amendment filed on November 21, 2005.

Claims 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art Fig. 8 together with United States Patent 6,781,183 to Cho et al. (Cho).

With respect to independent claim 21, Prior Art Fig. 8 discloses a semiconductor device comprising: a conductive container capacitor bottom plate layer 70 comprising a single polysilicon layer; a first portion of said bottom plate layer which defines a receptacle, wherein said first portion of said bottom plate layer comprises a first texture; a second portion of said bottom plate layer which defines a rim to an interior of said receptacle; and a cell dielectric layer 80 formed over said bottom plate layer which contacts said first portion and said second portion of said bottom plate layer.

The difference between claim 21 and Prior Art Fig. 8 is claim 21's bottom plate layer's second portion comprises a second texture that is smoother than the first portion's texture (whereas Prior Art Fig. 8's bottom plate layer 70's first and second portions have the same roughened texture).

Cho teaches forming a container capacitor's bottom plate layer with a first receptacle portion having a roughened texture and a second rim portion having a smooth texture in order to prevent bridges between adjacent bottom plate layers (see the entire patent, particularly the Fig. 3 disclosure and column 5, lines 54-60).

It would have been obvious to one skilled in this art to form Prior Art Fig. 8's bottom plate layer 70 with a first receptacle portion having a roughened surface and a second rim portion having a smooth surface in order to prevent bridges between adjacent bottom plate layers as taught by Cho.

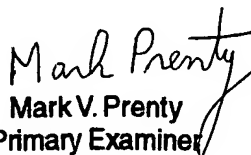
Claim 21 is thus rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art Fig. 8 together with Cho.

With respect to dependent claim 23, the obvious Prior Art Fig. 8/Cho device's bottom plate layer's first receptacle portion is hemispherical silicon grain (HSG) polysilicon (see the specification at paragraphs [0007-0008]) while the second rim portion remains smooth polysilicon.

Claim 23 is thus rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art Fig. 8 together with Cho.

Claims 17-20 and 24-26 are allowable over the prior art of record.

Registered practitioners can telephone the examiner at (571) 272-1843. Any voicemail message left for the examiner must include the name and registration number of the registered practitioner calling, and the Application/Control (Serial) Number. Technology Center 2800's general telephone number is (571) 272-2800.

  
Mark V. Prenty  
Primary Examiner